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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/647,378	11/08/2000	Itaru Kawakami	KOIK-T0185	7333

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EXAMINER

CALLAHAN, PAUL E

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/647,378	Applicant(s) KAWAKAMI ET AL.	
	Examiner Paul Callahan	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 9, 10, 14, 20 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 10, 14, 20 and 26 is/are allowed.
- 6) ☒ Claim(s) 1-4, 22-25, 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-4, 9, 10, 14, 20, and 22-27 remain pending in the instant application and have been examined.

Response to Arguments

2. Applicant's arguments filed 4-21-06 have been fully considered but they are not persuasive.

The Applicant argues in traverse of the rejection of claims 1 and 3 under 35 USC 102 as anticipated by Chandra, US 4,903,296, by asserting that Chandra fails to teach the newly added limitation found in claim 1 of a second processor that determines whether or not content management information found on the disk has been falsified. Yet a review of Chandra reveals that this feature is indeed taught at, for example col. 8 lines 10-20, where the host computer compares the characteristics of the marks read from the disk with the description of those characteristics found in an encrypted file on the disk. Transfer of the content data won't proceed unless there is a match. This constitutes determining whether the content management information in the form of the marks has been falsified.

The Applicant argues in traverse of the rejection of claims 25 and 27 by asserting that Heer fails to teach the lock and save keys of the Applicant's invention, where a lock key is used to undertake mutual authentication with another device and in generating a communications key, and where a save key is utilized to encrypt the communications

key. However the Examiner maintains that such is indeed taught by Heer at, for example, col. 3 lines 60-67; col. 4 lines 1-67; col. 5 lines 1-67; and col. 6 lines 1-40 as is detailed infra in the rejection of the claims.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4, and 22-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As for claim 4, the claim the claim is indefinite by virtue of reciting claim limitations directed to both an apparatus and method steps for its use. For example, the claim recites the limitation: "the program execution controller being adapted so that its internal operations cannot be confirmed from outside the semiconductor ship [sic], and, configured to perform a computation for checking any falsification made to the content management information". The claim therefore recites a method for the use of the program execution controller. See MPEP Sec. 2173.05.

As for claim 22, the claim is rendered indefinite by virtue of reciting claim limitations directed to both an apparatus and a method for using the apparatus. For

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example the claim recites the limitation: "authentication means for employing the lock key held in the memory when transmitting and receiving data to and from the other apparatus to make mutual authentication with the other apparatus to generate a communication key". This recites a method for use of both the memory and authentication means. See MPEP Sec. 2173.05.

As for claim 23, the claim is dependent on claim 22 and is thereby rejected on the same basis.

As for claim 24, the claim is indefinite by virtue of reciting claim limitations directed to both an apparatus and method steps for its use. For example, the claim recites the limitation: "an authentication program which uses, when the data is to be transferred to or from the portable device or server, the master key stored in the memory to make mutual authentication with the portable device or server to generate a communication key." The limitation recites a use for both the memory and the authentication means. See MPEP Sec. 2173.05.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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6. Claims 4, 22, and 24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims each recite limitations directed to both an apparatus and method steps for the use of the apparatus. Therefore the claims do not fall within only a single statutory class of invention as required by 35 USC 101 and are therefore directed towards non-statutory subject matter. See MPEP Sec. 2173.05:

II. PRODUCT AND PROCESS IN THE SAME CLAIM

A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. In *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990), a claim directed to an automatic transmission workstand and the method steps of using it was held to be ambiguous and properly rejected under 35 U.S.C. 112, second paragraph.

Such claims should also be rejected under 35 U.S.C. 101 based on the theory that the claim is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Id.* at 1551.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Chandra, US 4,903,296.

Chandra teaches an information processing apparatus comprising: a content data storage area (abstract) configured to store content data (abstract) and content management information (col. 3 line 27 through col. 4 line 5 and col. 6 lines 13-35: Chandra teaches imprinting magnetic “domains” on the disk that are destroyed on a first reading of the disk by a host computer, rendering the disk impossible to copy. This constitutes copy control management “information”, col. 4 lines 6-14 and col. 7 lines 15-35: an encrypted key necessary to decrypt the content data is stored on the disc: the content data cannot be decrypted unless this key can be decrypted by the host computer, this constitutes additional content management data.); a first controlling means for controlling reading/writing of content data from/to the content data storage area (col. 10 lines 5-35); a second control means independent of the first control means for decrypting and executing an encrypted program supplied from the first control means, and (col. 8 lines 50-67, col. 9 lines 13-40, col. 15 lines 60-67, fig. 11 item 200, col. 4 lines 20-40), to supply the result of the program execution to the first control means; the first control means controlling the reading/writing from/to the content data storage area based on the program execution result supplied from the second control means (col. 8 lines 50-67, col. 9 lines 13-40, col. 15 lines 60-67, fig. 11 item 200, col. 4 lines 20-40), and wherein the second control means performs a computation to determine if the content management information has been falsified (col. 8 lines 10-20: the host computer compares the characteristics of the marks read from the disk with the description of the characteristics found in an encrypted file on the disk. Transfer of the content data won’t proceed unless there is a match. This constitutes determining

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whether the content management information in the form of the marks has been falsified).

9. Claims 25 and 27 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Heer et al., US 5,999,629.

As for claim 25: Heer teaches an information processing method (abstract), comprising; transmitting and receiving data to and from other apparatus (abstract); holding a predetermined lock key and save key (col. 3 lines 60-67, col. 4 lines 1-67; col. 5 lines 1-67, col. 6 lines 1-40), using the lock key when transmitting and receiving data to and from the other apparatus to make a mutual authentication with the other apparatus to generate a communication key (col. 3 lines 60-67, col. 4 lines 1-67; col. 5 lines 1-67, col. 6 lines 1-40); encrypting the communication key with the save key (col. 3 lines 60-67, col. 4 lines 1-67; col. 5 lines 1-67, col. 6 lines 1-40) ; and storing the data received at the data transmitting and receiving step and having been encrypted with the communication key correspondingly to the communication key encrypted at the encrypting step (col. 3 lines 60-67, col. 4 lines 1-67; col. 5 lines 1-67, col. 6 lines 1-40).

As for claim 27, the claim is directed to the computer program product embodied in a memory medium that causes a computing device to carry out the method of claim 25. Therefore it is rejected on the same basis as is claim 25.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chandra.

As for Claim 2, Chandra teaches the apparatus as set forth in Claim 1, wherein: the content data storage area stores management information for managing the content data stored therein (col. 3 lines 1-10); Chandra does not explicitly teach a step where the first control means controls the second control means program to execute a predetermined computation based on the management information. However, Official Notice may be taken that such a step is old and well known in the art, for example in the distribution of copyright controlled media. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Chandra. it would have been desirable to do so as an additional security measure.

As for claim 3, Chandra teaches the apparatus as set forth in Claim 1, wherein:

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the first control means is data processor (col. 10 lines 5-35), and the second control means is a data processor incorporated in a semiconductor IC other than the data processor of the first control means (col. 8 lines 50-67). Chandra does not explicitly teach the content data storage area is a hard disc, however Chandra does disclose storage of the content data on magnetic media such as floppy disks, however Chandra does teach storage and production of backup copies of content data in col. 4 lines 31-40 which in many applications allows storage on a hard disk. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Chandra. It would have been desirable to do so as this would allow for secure storage within the host computer system of content data.

Allowable Subject Matter

12. The indicated allowability of claims 4, 22, and 24 as set forth in the previous Office have been withdrawn in light of the new grounds of rejection set forth supra. Claims 9, 10, 14, 20, and 26 are allowed

13. The following is a statement of reasons for the indication of allowable subject matter: The closest prior art in the field, Chandra and Heer, do not teach the combination of features found in the claims:

As per claims 9 and 14: particularly including a compressing means or encrypting means that compresses or encrypts data in a format other than the first format in which

data is supplied from an input means. Claim 10 is dependent on claim 9 and is therefore allowable on that basis.

As per claim 20: particularly including holding identification information of stored content data as a usage rule file, performing a computation with a hash function applied to the identification information, storing the result of the computation, and comparing the result of the computation with a past stored computation result to inhibit, when there is coincidence between the computation results, copy or move of the content data stored in the storage medium.

As for claim 26: particularly including storing the content data received via the interface and encrypted with the communication key in correspondence with the encryption key encrypted with a save key.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Emmanuel Moise, can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is: (571) 273-8300.

8-16-06

PEC

Paul Callahan


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER